

Umapathy Snehalatha

List of Publications by Year in descending order

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Version: 2024-02-01

66
papers

774
citations

687363

13
h-index

580821

25
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68
all docs

68
docs citations

68
times ranked

712
citing authors

#	ARTICLE	IF	CITATIONS
1	Fat-based studies for computer-assisted screening of child obesity using thermal imaging based on deep learning techniques: a comparison with quantum machine learning approach. <i>Soft Computing</i> , 2023, 27, 13093-13114.	3.6	6
2	Thermal Imaging Analysis in Detection of Childhood Obesity in Cervical Region Using Machine Learning Classifiers. <i>Advances in Intelligent Systems and Computing</i> , 2022, , 497-510.	0.6	0
3	AUTOMATED SEGMENTATION OF COVID-19 REGIONS FROM LUNG CT IMAGES USING WATERSHED ALGORITHM AND CLASSIFICATION USING MACHINE LEARNING CLASSIFIERS. <i>Biomedical Engineering - Applications, Basis and Communications</i> , 2022, 34, .	0.6	2
4	A lung tumor detection technique using gradient vector flow algorithm. <i>AIP Conference Proceedings</i> , 2022, , .	0.4	0
5	Detection of face skin cancer using deep convoluted neural network. <i>AIP Conference Proceedings</i> , 2022, , .	0.4	0
6	DESIGN AND IMPLEMENTATION OF A PORTABLE AUTOMATED AUDIOMETER FOR HEARING CLASSIFICATION USING MACHINE LEARNING APPROACHES. <i>Biomedical Engineering - Applications, Basis and Communications</i> , 2022, 34, .	0.6	2
7	Automated evaluation of rheumatoid arthritis from hand radiographs using Machine Learning and deep learning techniques. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2022, 236, 1238-1249.	1.8	11
8	Computer aided diagnosis of obesity based on thermal imaging using various convolutional neural networks. <i>Biomedical Signal Processing and Control</i> , 2021, 63, 102233.	5.7	12
9	Thermal imaging method to evaluate childhood obesity based on machine learning techniques. <i>International Journal of Imaging Systems and Technology</i> , 2021, 31, 1752-1768.	4.1	4
10	AUTOMATED SEGMENTATION OF HEEL FISSURES BASED ON THERMAL IMAGE PROCESSING AND CLASSIFICATION BASED ON MACHINE LEARNING ALGORITHMS. <i>Biomedical Engineering - Applications, Basis and Communications</i> , 2021, 33, 2150032.	0.6	0
11	Deep learning techniques for automated detection of autism spectrum disorder based on thermal imaging. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2021, 235, 1113-1127.	1.8	16
12	Automated detection of orofacial pain from thermograms using machine learning and deep learning approaches. <i>Expert Systems</i> , 2021, 38, e12747.	4.5	6
13	Non-invasive thyroid detection based on electroglottogram signal using machine learning classifiers. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2021, 235, 1128-1145.	1.8	2
14	A breathalyzer for the assessment of chronic kidney disease patients's™ breathprint: Breath flow dynamic simulation on the measurement chamber and experimental investigation. <i>Biomedical Signal Processing and Control</i> , 2021, 70, 103060.	5.7	8
15	Adsorption kinetics feature extraction from breathprint obtained by graphene based sensors for diabetes diagnosis. <i>Journal of Breath Research</i> , 2021, 15, 016005.	3.0	30
16	Thermography and colour Doppler ultrasound: a potential complementary diagnostic tool in evaluation of rheumatoid arthritis in the knee region. <i>Biomedizinische Technik</i> , 2020, 65, 289-299.	0.8	10
17	An overview on the exponential growth of non-invasive diagnosis of diabetes mellitus from exhaled breath by nanostructured metal oxide Chemi-resistive gas sensors and 1/4-preconcentrator. <i>Biomedical Microdevices</i> , 2020, 22, 2.	2.8	35
18	Thermal imaging method in the evaluation of psoriasis in upper limb region. <i>IOP Conference Series: Materials Science and Engineering</i> , 2020, 912, 062026.	0.6	2

#	ARTICLE	IF	CITATIONS
19	Estimation of Glottal Function based on Electroglottography for Normal and Thyroid Subjects â€“ Hardware Design. , 2020, , .		1
20	Analysis of Heel Fissure Therapy using Thermal Imaging and Image Processing. , 2020, , .		0
21	Thermal imaging method in the evaluation of obesity in various body regionsâ€“A preliminary study. IOP Conference Series: Materials Science and Engineering, 2020, 912, 062022.	0.6	3
22	SHAKOâ€“Smart Helmet Arduino Kindled Optimization. IOP Conference Series: Materials Science and Engineering, 2020, 912, 062023.	0.6	1
23	A handheld device to monitor physiological changes using sweat. IOP Conference Series: Materials Science and Engineering, 2020, 912, 062036.	0.6	0
24	A computer aided diagnostic method for the evaluation of type II diabetes mellitus in facial thermograms. Physical and Engineering Sciences in Medicine, 2020, 43, 871-888.	2.4	12
25	Automated heart sound classification system from unsegmented phonocardiogram (PCG) using deep neural network. Physical and Engineering Sciences in Medicine, 2020, 43, 505-515.	2.4	67
26	Human Tongue Thermography Could Be a Prognostic Tool for Prescreening the Type II Diabetes Mellitus. Evidence-based Complementary and Alternative Medicine, 2020, 2020, 1-16.	1.2	21
27	Classification of Prediabetes and Healthy Subjects in Plantar Infrared Thermal Imaging Using Various Machine Learning Algorithms. Lecture Notes in Networks and Systems, 2020, , 85-96.	0.7	3
28	Design and Analysis of Customized Hip Implant Using Finite Element Method. Advances in Intelligent Systems and Computing, 2020, , 515-525.	0.6	1
29	Evaluation of body composition parameters using various diagnostic methods: A meta analysis study. Obesity Medicine, 2019, 16, 100150.	0.9	10
30	Design and development of portable prototype for human breath analysis: a comparative study between haemodialysis patients and healthy subjects. Biomedical Physics and Engineering Express, 2019, 5, 025045.	1.2	13
31	Design and Development of Wearable Device for Continuous Monitoring of Sleep APNEA Disorder. , 2019, , .		6
32	Wearable Cardiorespiratory Monitoring Device for Heart Attack Prediction. , 2019, , .		7
33	Comparative Study on the Preparation and Gas Sensing Properties of Reduced Graphene Oxide/SnO ₂ Binary Nanocomposite for Detection of Acetone in Exhaled Breath. Analytical Chemistry, 2019, 91, 5116-5124.	6.5	75
34	SEGMENTATION OF LIVER TUMOR USING FAST GREEDY SNAKE ALGORITHM. Biomedical Engineering - Applications, Basis and Communications, 2019, 31, 1950013.	0.6	5
35	A comparison of online and offline measurement of exhaled breath for diabetes pre-screening by graphene-based sensor; from powder processing to clinical monitoring prototype. Journal of Breath Research, 2019, 13, 036008.	3.0	26
36	Thermal Imaging of Abdomen in Evaluation of Obesity: A Comparison with Body Composition Analyzerâ€“â€“A Preliminary Study. Lecture Notes in Computational Vision and Biomechanics, 2019, , 79-87.	0.5	4

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37	Thermal Image Segmentation of Facial Thermograms Using K-Means Algorithm in Evaluation of Orofacial Pain. Lecture Notes in Computational Vision and Biomechanics, 2019, , 565-572.	0.5	2
38	Detection of Liver Tumor Using Gradient Vector Flow Algorithm. Lecture Notes in Computational Vision and Biomechanics, 2019, , 1055-1065.	0.5	0
39	NON-INVASIVE BLOOD GLUCOSE ANALYSIS BASED ON GALVANIC SKIN RESPONSE FOR DIABETIC PATIENTS. Biomedical Engineering - Applications, Basis and Communications, 2018, 30, 1850009.	0.6	5
40	Spectral Analysis of Speech Signal Characteristics: A Comparison Between Healthy Controls and Laryngeal Disorder. Advances in Intelligent Systems and Computing, 2018, , 333-341.	0.6	7
41	Computer Aided Diagnosis Based Hand Thermal Image Analysis: A Potential Tool for the Evaluation of Rheumatoid Arthritis. Journal of Medical and Biological Engineering, 2018, 38, 666-677.	1.8	24
42	Automated speech signal analysis based on feature extraction and classification of spasmodic dysphonia: a performance comparison of different classifiers. International Journal of Speech Technology, 2018, 21, 9-18.	2.2	6
43	An investigation of GO-SnO ₂ -TiO ₂ ternary nanocomposite for the detection of acetone in diabetes mellitus patient's breath. Applied Surface Science, 2018, 449, 677-684.	6.1	62
44	Raman Monte Carlo Simulation of Tooth Model with Embedded Sphere for Different Launch Beam Configurations. , 2018, , .		1
45	Facial thermography: a potential complimentary tool for evaluation of dental disorders. International Journal of Engineering and Technology(UAE), 2018, 7, 175.	0.3	2
46	Automated segmentation of knee thermal imaging and X-ray in evaluation of rheumatoid arthritis. International Journal of Engineering and Technology(UAE), 2018, 7, 326.	0.3	4
47	Semi-automated approach in the evaluation of low bone mass using clavicle radiogrammetry technique. International Journal of Engineering and Technology(UAE), 2018, 7, 169.	0.3	0
48	Evaluation of low bone mass and prediction of fracture risk using metacarpal radiogrammetry method: a comparative study with <sc>DXA</sc> and X-ray phantom. International Journal of Rheumatic Diseases, 2018, 21, 1350-1371.	1.9	7
49	Ultrasound Thyroid Image Segmentation, Feature Extraction, and Classification of Disease Using Feed Forward Back Propagation Network. Advances in Intelligent Systems and Computing, 2018, , 89-98.	0.6	6
50	Computer-based automated analysis of X-ray and thermal imaging of knee region in evaluation of rheumatoid arthritis. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2017, 231, 1178-1187.	1.8	16
51	Automated Hand Radiograph Segmentation, Feature Extraction and Classification Using Feed Forward BPN Network in Assessment of Rheumatoid Arthritis. Advances in Intelligent Systems and Computing, 2017, , 133-154.	0.6	1
52	Computer-based measurements of joint space analysis using metacarpal morphometry in hand radiograph for evaluation of rheumatoid arthritis. International Journal of Rheumatic Diseases, 2017, 20, 1120-1131.	1.9	7
53	ASSESSMENT OF LOW BONE MASS USING PERIPHERAL DUAL X-RAY ABSORPTIOMETRY (PDXA) IN DIFFERENT ETHNIC GROUPS. Asian Journal of Pharmaceutical and Clinical Research, 2017, 10, 74.	0.3	0
54	Estimation of low bone mass using forearm and calcaneum bone mineral density in young Indian population. , 2017, , .		0

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55	Automated skin disease segmentation and classification using multi-class SVM classifier. , 2016, , .		13
56	Diagnosis of rheumatoid arthritis in knee using fuzzy C means segmentation technique. , 2016, , .		9
57	Automated thermal image segmentation of knee rheumatoid arthritis. , 2016, , .		7
58	Ultrasound Color Doppler Image Segmentation and Feature Extraction in MCP and Wrist Region in Evaluation of Rheumatoid Arthritis. Journal of Medical Systems, 2016, 40, 197.	3.6	5
59	Classification of Right Bundle Branch Block and Left Bundle Branch Block Cardiac Arrhythmias Based on ECG Analysis. Advances in Intelligent Systems and Computing, 2015, , 331-341.	0.6	4
60	Automated hand thermal image segmentation and feature extraction in the evaluation of rheumatoid arthritis. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2015, 229, 319-331.	1.8	38
61	Automated segmentation using PCA and area estimation of thyroid gland using ultrasound images. , 2015, , .		5
62	Evaluation of complete Freundâ€™s adjuvant-induced arthritis in a Wistar rat model. Zeitschrift Fur Rheumatologie, 2013, 72, 375-382.	1.0	106
63	Thermal image analysis and segmentation of hand in evaluation of rheumatoid arthritis. , 2012, , .		21
64	Dual tree wavelet transform based watershed algorithm for image segmentation in hand radiographs of arthritis patients and classification using BPN neural network. , 2012, , .		6
65	Evaluation of functional ability of rheumatoid arthritis based on HAQ score and BMD among South Indian patients. Rheumatology International, 2012, 32, 1997-2004.	3.0	2
66	Evaluation of rheumatoid arthritis in small animal model using Thermal imaging. , 2011, , .		7